CamoKote C20 Series

Gloss Colors

High Solid Polyurethane Topcoat

Product

CamoKote C20 Series High Solid Polyurethane Topcoat - Gloss Colors

Item Class

High Solid Polyurethane Topcoat

CamoKote C20 Series is a high solid polyurethane topcoat formulated to provide superior resistance and excellent coverage for military and defense applications. With an average 50% solid per gallon; it also offers better coverage than most other polyurethane coatings on the market. This product is formulated to surpass conventional polyurethanes with superior chemical resistance and flexibility.

Specifications

Product is manufactured to meet the performance requirements of the following specifications:

DMS 2115 Ty I - DPM 6330-01 - G37.5531 - GP110AEE - GP110AEF - MEP 10-69 - MIL-PRF-85285F Ty I-IV, Cl H, Form M, Gr N - Z-12.390/MIL-PRF-85285 - Z-12.520/SP-J-513-A-0014 Ty I - Z-12.380/SP-J-513-B-0309 - SP-J-513-C-0083 Ty I, Cl A - SP-J-513-C-0083 Ty I, Cl B

Catalyst & Additives

Catalyst/Activator	Thinner	Additive
410	CS34 (High Temperatures)	PS40 Accelerator
	CM100 (Normal Conditions)	CRL25 Rolling/Brushing
	CF3 (Low Temperatures)	CRL28 Rolling/Brushing High Temperatures
		HF12 High Humidity Additive
*AVAILABLE IN VARIOUS KIT SIZES		

Use of Primers

Please contact your local 3Chem representative for a complete list of epoxy primers which may be utilized with this system.

Surface Preparation

Prepare substrate per OEM requirements. Refer to CamoKote application guide for detailed instructions or contact your local 3Chem representative for assistance.

Mixing Instructions

Base	Catalyst/Activator	Thinner	Mix Ratio
C201-XXXX (Gloss)	410	See Chart Below	1:1:.25 (Max)

Shake (Base) for 15 minutes to assure no solid settlement remains in can. Add component B catalyst to component A paint first. Then add recommended thinner reducer from chart below. Refer to thinner option chart below for detailed mixing information. Mix ratio for material is 1-part component A paint, 1-part component B catalyst and between .10 to .25 parts thinner (or 5 to 12.5% by volume) depending on environmental conditions and applicator preference. Opaque colors such as whites and grays will typically require more thinner while less opaque colors such as reds and yellows will require less. Kit including thinner should yield either a maximum of 2.25 gallons or

2.25 quarts. Product viscosity is contingent on environmental conditions. Therefore, check material viscosity to determine exact percentage of thinner to be added while staying within the recommended ranges.

Induction Time Although no induction time is needed. Once components are mixed, ensure that admixed material is continuously stirred for at least 5 minutes before proceeding.

Spraying Viscosity 16-19 Seconds with #2 Zahn cup (Once thinner is added)

Pot Life 7 Hours @ 21° Celsius, 70° Fahrenheit (Higher temperatures will shorten pot life)

Film Thickness 2-3 Mils DFT (2 Coats @ 1-1.5 DFT) Wet film thickness should be 4-6 Mils total between 2 coats

Application Instructions

Temperature and Humidity	Minimum	Maximum
Temperature Celsius	11°	38°
Temperature Fahrenheit	52°	100°
Humidity	33%	74%

**For Humidity above 74%, use HF12 Additive. Max recommended relative humidity at application is 90%.
HF12 high humidity additive should be added to admix material (paint, activator, thinner) at a rate of 2% max by volume.

Spray Equipment

Spray Gun Type	Tip/Nozzle Size	Air Pressure	Pot Pressure
Conventional Air	1.3 - 1.6 mm	40 to 60 psi	10 to 20 psi
HVLP	1.4 - 1.6mm	10 psi at cap	10 to 20 psi
Air Electrostatic	1.2 - 1.5mm	45 to 60 psi	10 to 40 psi
Air Assist Airless Electrostatic	.23 - .34 mm	40 to 60 psi	700 to 1200 psi

Dry Times: ***Thinner Options for Gloss Colors Only

Temperature	Thinner	PS40	Wet-Edge	Time Between Coats	Dry to Tape	Dry to Handle	Full Cure
52-65°F (11-18°C)	CF3	0.25%	50 Min	1-1.5 Hours	8-10 Hours	12 Hours	6 Days
66-75°F (19-23°C)	CM100	0.20%	40 Min	45-60 Min	7-8 Hours	9-10 Hours	6 Days
76-85°F (24-29°C)	CM100	0.10%	40 Min	45-60 Min	7-8 Hours	9-10 Hours	6 Days
86-100°F (30-38°C)	CS34	N/A	30 Min	45-60 Min	6-7 Hours	7-8 Hours	6 Days

*** Do not use PS40 accelerator in temperatures over 85°F (29°C)**

Only mix enough material to be applied on initial coat. Always add component B catalyst to component A paint then add recommended thinner reducer based on environmental condition. Refer to thinner option chart above. Complete kit of material will yield a maximum of 2.25 US Gallons (8.5 liters). 1-gallon component A paint, 1-gallon component B catalyst, 1 quart thinner (32 US oz. / 946 ml).

Always check product viscosity using #2 Zahn cup to confirm exact amount of thinner required to achieve recommended application viscosity. Recommended thinning range is between 5% and 12.5% max.

For organic yellow, orange, red, and some green, and blue colors it is necessary to apply a coat of solid white or light gray C20 Series prior to final color application.

Apply one tack coat of material using a uniform spray pattern. Wait recommend time between coats based on chart above. Initial coat should be tacky before applying second coat. Applying second coat too early will lead to possible running of material. Waiting too long will lead to a dull finish. Mix enough material to be applied on second coat. Use same mixing instruction from initial coat above.

Apply a second medium wet coat using a uniform spray pattern. Second coat must appear wet and uniform once complete. Take care not to leave any dry areas or spots. Wet these areas if necessary, to assure a uniform finish. Wait appropriate dry to tape or dry to handle time based on chart above.

Application Instructions PS40 Accelerator (Fast dry additive mix options for touch up applications)

PS40 Accelerator	Dry Between Coats	Dry to Handle	Dry Hard	Pot Life	Full Cure
0.25% By Volume	12 Minutes	2 Hours	4 Hours	4 Hours	6 Days
0.30% By Volume	10 Minutes	1.5 Hours	3 Hours	3 Hours	6 Days
0.40% By Volume	5 Minutes	45 Minutes	1 Hour	45 Minutes	6 Days

*Note: Overuse of PS40 additive may affect product gloss and finish

Force Cure: If deemed necessary oven curing is possible to reduce dry to tape and handle times. After application, allow coating to air dry for 1 hour at room temperature (75° F), then force cure for 2 hours at 120° F.

Theoretical Coverage 800-900 sq. ft / gallon @ 1 mil 20-22m2 / liter @1 mil
*Coverage based on 100% transfer efficiency rate

Dry Film Weight Per 25 microns: 27-35 g/m2
Per dry mil: .0057-.0082 lbs./ft2

Color Available in all color ranges

Gloss Gloss colors: 90 minimum @ 60 degrees

Volatile Organic Compound 340 – 390 g/l

Shelf Life 24 Months (When stored in climate-controlled environment between 60-80° F)
*Product may be re-certified upon inspection by 3Chem.

Safety Instructions Always read material safety data sheet (SDS) and product label before utilizing this product. Product SDS is available upon request.